Claim Amendments

Please amend claims 27 and 43 as indicated.

1. – 17. (Canceled)

18. (Previously Presented) An integrated data processing device comprising:
a first circuit coupled to a first voltage reference node;
a second circuit coupled to a second voltage reference node;
an electrostatic discharge protection device operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising
a first conductivity type junction formed between a first region of a first conductivity type and a second region of a second conductivity type;
a second conductivity type junction formed between the second region and a third region of the first conductivity type;
a third conductivity type junction formed between the third region and a fourth region of the second conductivity type, the fourth region coupled to the second voltage reference node; and
an anode node coupled to the first voltage reference node and connected to one or more regions of the electrostatic discharge protection device including the first region, wherein all regions of the discharge protection device connected to the anode node are of a common conductivity type; and
a low voltage trigger control portion coupled to the second region and the third region to provide a electrostatic discharge protection device triggering current at a voltage of less than 10 volts.

19. (Canceled)

20. (Canceled)

21. (Previously Presented) An apparatus comprising:

a first circuit coupled to a first voltage reference node;

a second circuit coupled to a second voltage reference node;

an electrostatic discharge protection device operable to provide a current path and a capacitance of less than 120 Femtofarads between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising

a thyristor coupled between the first voltage reference node and the second voltage reference node to provide the current path.

22. (Canceled)

23. (Previously Presented) The apparatus of claim 21 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

24. (Previously Presented) The apparatus of claim 21 wherein the first circuit is a radio frequency analog circuit.

25. (Previously Presented) The apparatus of claim 23 wherein the second circuit is a digital circuit.

26. (Previously Presented) The apparatus of claim 24 wherein the second circuit is an analog circuit.

27. (Currently Amended) A method comprising ~~the steps of~~:

providing a voltage reference to a first circuit of an integrated circuit device using a first voltage reference node during normal operation;

providing the voltage reference to a second circuit of the integrated circuit device using a second voltage reference node during normal operation, the second voltage reference node and the first voltage reference node being different nodes;

detecting a voltage difference between the first voltage reference node and the second voltage reference node of less than approximately 10 volts to determine when an electrostatic discharge event is occurring; and

providing a conductive path through a thyristor having a capacitance of less than 120 Femtofarads from anode to cathode when the voltage difference is detected.

28. (Canceled)

29. (Previously Presented) The method of claim 27, wherein the voltage difference is less than 10 volts.

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Previously Presented) An apparatus comprising:

a thyristor comprising

a plurality conductivity type junctions comprising

a first conductivity type junction formed between a first region of a first conductivity type and a second region of a second conductivity type;

a second conductivity type junction formed between the second region and a third region of the first conductivity type;

a third conductivity type junction formed between the third region and a fourth region of the second conductivity type;

a voltage trigger control coupled to the second region and the third region to provide a thyristor triggering current at a voltage of less than 10 volts;

an anode connected to the plurality of conductivity type junctions only at the first region;

a cathode coupled to the fourth region;

a first voltage reference node coupled to a first circuit and the anode; and

a second voltage reference node coupled to a second circuit and the cathode, wherein the thyristor is operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event.

34. (Previously Presented) The apparatus of claim 33 wherein the second region is a well region of the second conductivity type.

35. (Previously Presented) The apparatus of claim 34 wherein the third region is a well region of the first conductivity type.

36. (Previously Presented) The apparatus of claim 35, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

37. (Previously Presented) The apparatus of claim 33, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

38. (Previously Presented) The apparatus of claim 33, wherein the first voltage reference node and the second reference node are to provide a common voltage reference.

39. (Canceled)

40. (Previously Presented) The apparatus of claim 33, wherein the voltage trigger control is a zener diode.

41. (Previously Presented) The apparatus of claim 33, wherein the voltage trigger control is a field effect transistor.

42. (Previously Presented) The apparatus of claim 18, wherein the first voltage reference node and the second voltage reference node are ground nodes.

43. (Currently Amended) The device of claim 42, wherein the electrostatic discharge protection device further comprises:

[[and]]a cathode node coupled to the second voltage reference node and connected to one or more regions of the electrostatic discharge protection device including the fourth region, wherein all regions of the electrostatic discharge protection device connected to the anode node are of a common conductivity type.

44. (Previously Presented) The apparatus of claim 18 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

45. (Previously Presented) The apparatus of claim 44 wherein the second circuit is a digital circuit.

46. (Previously Presented) The apparatus of claim 18 wherein the first circuit is a radio frequency analog circuit.

47. (Previously Presented) The apparatus of claim 46 wherein the second circuit is an analog circuit.

48. (Previously Presented) The apparatus of claim 18, wherein the low voltage trigger control portion is a zener diode.

49. (Previously Presented) The apparatus of claim 18, wherein the low voltage trigger control portion is a field effect transistor.

50. (Previously Presented) An integrated data processing device comprising:

a first circuit coupled to a first voltage reference node;

a second circuit coupled to a second voltage reference node;

an electrostatic discharge protection device operable to provide a current path and a capacitance of less than 120 Femtofarads between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising

a first conductivity type junction formed between a first region of a first conductivity type and a second region of a second conductivity type;

a second conductivity type junction formed between the second region and a third region of the first conductivity type;

a third conductivity type junction formed between the third region and a fourth region of the second conductivity type, the fourth region coupled to the second voltage reference node; and

an anode node coupled to the first voltage reference node and connected to one or more regions of the electrostatic discharge protection device including the first region, wherein all regions of the discharge protection device connected to the anode node are of a common conductivity type.

51. (Previously Presented) The apparatus of claim 51 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

52. (Previously Presented) The apparatus of claim 50a wherein the second circuit is a digital circuit.

53. (Previously Presented) The apparatus of claim 53 wherein the first circuit is a radio frequency analog circuit.

54. (Previously Presented) The apparatus of claim 50b wherein the second circuit is an analog circuit.

55. (Previously Presented) An apparatus comprising:
a first circuit coupled to a first voltage reference node;
a second circuit coupled to a second voltage reference node;
an electrostatic discharge protection device operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising
a thyristor coupled between the first voltage reference node and the second voltage reference node to provide the current path, the thyristor comprising a voltage trigger control portion coupled to provide a thyristor triggering current at a voltage of less than 10 volts.

56. (Previously Presented) The apparatus of claim 55 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

57. (Previously Presented) The apparatus of claim 56 wherein the second circuit is a digital circuit.

58. (Previously Presented) The apparatus of claim 55 wherein the first circuit is a radio frequency analog circuit.

59. (Previously Presented) The apparatus of claim 58 wherein the second circuit is an analog circuit.

60. (Previously Presented) The apparatus of claim 55, wherein the voltage trigger control portion is a zener diode.

61. (Previously Presented) The apparatus of claim 55, wherein the voltage trigger control portion is a field effect transistor.

62. (Previously Presented) The apparatus of claim 27 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

63. (Previously Presented) The apparatus of claim 62 wherein the second circuit is a digital circuit.

64. (Previously Presented) The apparatus of claim 27 wherein the first circuit is a radio frequency analog circuit.

65. (Previously Presented) The apparatus of claim 64 wherein the second circuit is an analog circuit.

66. (Previously Presented) The apparatus of claim 33 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

67. (Previously Presented) The apparatus of claim 66 wherein the second circuit is a digital circuit.

68. (Previously Presented) The apparatus of claim 33 wherein the first circuit is a radio frequency analog circuit.

69. (Previously Presented) The apparatus of claim 68 wherein the second circuit is an analog circuit.

70. (Previously Presented) The apparatus of claim 33, wherein the voltage trigger control is a zener diode.

71. (Previously Presented) The apparatus of claim 33, wherein the voltage trigger control is a field effect transistor.

72. (Previously Presented) An apparatus comprising:

a thyristor operable to provide a current path from a first region to a fourth region having

a capacitance of less than 120 Femtofarads comprising

a plurality conductivity type junctions comprising

a first conductivity type junction formed between the first region of a first conductivity type and a second region of a second conductivity type;

a second conductivity type junction formed between the second region and a third region of the first conductivity type;

a third conductivity type junction formed between the third region and the fourth region of the second conductivity type;

an anode connected to the plurality of conductivity type junctions only at the first region;

a cathode coupled to the fourth region;

a first voltage reference node coupled to a first circuit and the anode; and

a second voltage reference node coupled to a second circuit and the cathode, wherein the thyristor is operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event.

73. (Previously Presented) The apparatus of claim 72 wherein the second region is a well region of the second conductivity type.

74. (Previously Presented) The apparatus of claim 73 wherein the third region is a well region of the first conductivity type.

75. (Previously Presented) The apparatus of claim 74, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

76. (Previously Presented) The apparatus of claim 72, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

77. (Previously Presented) The apparatus of claim 72, wherein the first voltage reference node and the second reference node are to provide a common voltage reference.

78. (Previously Presented) The apparatus of claim 72 further comprising:

a voltage trigger control coupled to the second region and the third region to provide a thyristor triggering current.

79. (Previously Presented) The apparatus of claim 78, wherein the voltage trigger control is a zener diode.

80. (Previously Presented) The apparatus of claim 78, wherein the voltage trigger control is a field effect transistor.

81. (Previously Presented) The apparatus of claim 72 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

82. (Previously Presented) The apparatus of claim 81 wherein the second circuit is a digital circuit.

83. (Previously Presented) The apparatus of claim 72 wherein the first circuit is a radio frequency analog circuit.

84. (Previously Presented) The apparatus of claim 83 wherein the second circuit is an analog circuit.